

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1 1. (Original) A system for displaying a three-dimensional image of an organ
2 or structure inside the body, the system comprising:
3 a processor configured to be communicatively coupled to a probe, the
4 probe being configured to be located in or adjacent to the organ or structure inside the
5 body;
6 memory coupled to the processor and configured to store image data
7 pertaining to the organ or structure inside the body; and
8 a three-dimensional display coupled to the processor and configured to
9 simultaneously display the three-dimensional image and a representation of the probe.
- 1 2. (Original) The system of claim 1, wherein the representation of the probe
2 is registered with the three dimensional image of the organ or structure inside the
3 body.
- 1 3. (Original) The system of claim 1, wherein the representation of the probe
2 is registered with the three dimensional image of the organ or structure inside the
3 body using a localization system.
- 1 4. (Original) The system of claim 1, wherein the organ or structure inside the
2 body is a heart.
- 1 5. (Original) The system of claim 1, wherein the probe is a catheter.
- 1 6. (Original) The system of claim 1, wherein the system is an
2 electrophysiology system.
- 1 7. (Original) The system of claim 1, wherein the image data is acquired prior
2 to the probe being positioned inside the body.

1 8. (Original) The system of claim 1, wherein the image data is acquired
2 during the image-guided intervention procedure using an internal medical imaging
3 device.

1 9. (Original) The system of claim 1, wherein the system is further configured
2 to display a map of the electrical properties of the organ or structure inside the body.

1 10. (Original) The system of claim 1, wherein the system is further configured
2 to display historical data related to the organ or structure inside the body.

1 11. (Original) The system of claim 1, wherein the system is further configured
2 to display auxiliary data related to an image-guided interventional procedure.

1 12. (Original) The system of claim 1, wherein the display is further
2 configured to display visual navigational information related to an image-guided
3 intervention procedure.

1 13. (Original) The system of claim 1, wherein the three-dimensional display is
2 a spatial three-dimensional display.

1 14. (Original) A system for displaying a three-dimensional image of a heart,
2 the system comprising:
3 a processor configured to be communicatively coupled to a probe;
4 memory coupled to the processor and configured to store image data
5 pertaining to the heart; and
6 a three-dimensional display coupled to the processor and configured to
7 simultaneously display the three-dimensional image of the heart and a representation
8 of the probe.

1 15. (Original) The system of claim 14, wherein the representation of the probe
2 is registered with the three dimensional image of the heart.

1 16. (Original) The system of claim 14, wherein the representation of the probe
2 is registered with the three dimensional image of the heart using a localization system.

1 17. (Original) The system of claim 14, wherein the system is an
2 electrophysiology monitoring system.

1 18. (Original) The system of claim 14, wherein the probe is a catheter
2 configured to collect data representative of the electrical properties of the heart.

1 19. (Original) The system of claim 14, wherein the system is further
2 configured to display a map of the electrical properties of the heart.

1 20. (Original) The system of claim 14, wherein the three-dimensional display
2 is a spatial three-dimensional display.

1 21. Cancelled.

1 22. (Currently Amended) A system for displaying a three-dimensional
2 image of an organ or structure inside the body, the system comprising:
3 a processor configured to be communicatively coupled to a probe, the
4 probe being configured to be located in or adjacent to the organ or structure inside the
5 body and to collect data representative of the electrical properties of the organ or
6 structure inside the body;
7 memory coupled to the processor and configured to store image data
8 pertaining to the organ or structure inside the body; and
9 a three-dimensional display coupled to the processor and configured to
10 display the three-dimensional image and a map of the electrical properties of the
11 organ or structure inside the body, wherein the display is further configured to
12 simultaneously display a representation of the probe, wherein the representation of the
13 probe is registered with the three dimensional image of the organ or structure inside
14 the body.

1 23-28. Cancelled.

1 29. (Original) A system for displaying a three-dimensional image of an organ
2 or structure inside the body, the system comprising:

3 memory configured to store a first set of image data pertaining to the
4 organ or structure inside the body;
5 a processor coupled to the memory and configured to be
6 communicatively coupled to an imaging device and a probe, the
7 imaging device being configured to generate a second set of image
8 data pertaining to the organ or structure inside the body, and the probe
9 being configured to be located in or adjacent to the organ or structure
10 inside the body, the processor further configured to generate the three-
11 dimensional image using the first set of image data and the second set
12 of image data; and
13 a three-dimensional display coupled to the processor and configured to
14 simultaneously display the three-dimensional image and a
15 representation of the probe.

1 30. (Original) The system of claim 29, wherein the system is configured to
2 provide a warning related to an image-guided interventional procedure.

1 31. (Original) The system of claim 29, wherein the system is configured to
2 provide a warning when the first set of image data differs from the second set
3 of image data according to a predetermined criterion.

1 32. (Original) The system of claim 29, wherein the system is configured to
2 determine a first estimate of the location of the probe and a second estimate of
3 the location of the probe and to provide a warning when the first estimate
4 differs from the second estimate according to a predetermined criterion.